Integrated Regional Water Management

What is IRWM?

Integrated Regional Water Management (IRWM) is a collaborative effort to manage all aspects of water resources in a region. IRWM differs from traditional approaches to water resource management by integrating all facets of water supply, water quality, waste water treatment, and flood and storm water management.

IRWM crosses jurisdictional, watershed, and political boundaries; involves multiple agencies, stakeholders, individuals, and groups; and attempts to address the issues and differing perspectives of all the entities involved through mutually beneficial solutions.

IRWM is an example of integrated resource planning, which began in the late 1980s in the electric power industry as a comprehensive approach to resource management and planning. When applied to water management, integrated resource planning is a systems approach that explores the cause-and-effect relationships between different aspects of water resource management, with an understanding that changes in the management of one aspect of water resources can affect others. Because water resources are often not confined to the boundaries of a single water management agency, a consensus-based, cross-jurisdictional, regional approach provides an opportunity to formulate comprehensive solutions to water resource issues within a region.

The methods used in the IRWM include a range of water resource management strategies, which relate to water supply, water quality, water use efficiency, operational flexibility, and stewardship of land and natural resources.

Background

Although IRWM planning has roots in integrated resource planning, recent developments have caused a surge in IRWM activity in California.

The Integrated Regional Water Management Act of 2002 (Senate Bill 1672, Costa) amended the California Water Code (CWC) to add §10530 to encourage local agencies to work cooperatively to manage local and imported water supplies to improve the quality, quantity, and reliability of those supplies. While this act provided the authority for IRWM plans, it gave little guidance or incentive for IRWM planning or implementation.

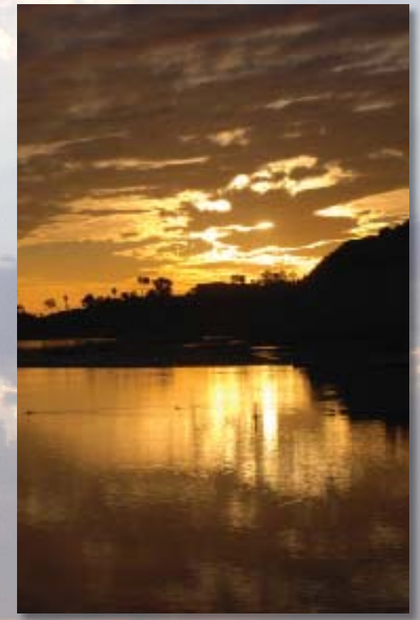
In November 2002, California voters passed Proposition 50, the Water Security, Clean Drinking Water, Coastal and Beach Protection Act of 2002, which provided $500,000,000 (CWC §79560-79565) to fund competitive grants for projects consistent with an adopted IRWM plan. The grant program was run as a joint effort between the Department of Water Resources (DWR) and the State Water Resources Control Board to provide both planning and implementation grants to IRWM efforts.

The incentive provided by this funding, as well as the direction provided in grant program guidelines, were major drivers for progress in IRWM over the last several years.

In December 2005, DWR released the California Water Plan (CWP) Update, 2005, which names the IRWM as a key initiative to ensure reliable water supplies.

In November 2006, California voters passed Proposition 84, the Safe Drinking Water, Water Quality, and Supply, Flood Control, River and Coastal Protection Bond Act of 2006. Proposition 84 provides $1,000,000,000 for IRWM planning and implementation. At the same time, California voters also passed Proposition 1E, the Disaster Preparedness and Flood Prevention Bond Act of 2006, which provides, among other actions, $300,000,000 for storm water projects that reduce flood damage and are consistent with an IRWM plan.

In October 2009, DWR released the CWP Pre-Final Draft, Update 2009, which emphasizes the need for integrated regional water management. As stated in the Highlights volume, "IRWM provides a critical framework for actions to address the uncertainties presented by climate change as well as other risks to California's water future." The first objective in the implementation chapter (Volume 1, Chapter 7) is to promote, improve, and expand integrated regional water management.



Frequently Asked Questions

How is IRWM different than what came before?
In general, IRWM involves looking at water management issues from a multitude of perspectives as diverse stakeholders engage one another. That process can yield multi-benefit projects that meet several entities' goals and objectives in a more cost effective manner than each entity acting on its own. Previously, water management entities tended to work with a narrow focus on their service area and primary function, sometimes competing against similar efforts to resolve similar issues or advancing duplicative efforts.

Why is IRWM important to me? Why should I participate?
IRWM operates on the principle that each stakeholder holds a piece of the water management solution for their region and that the best solutions require better communication and understanding of regional issues than has previously occurred. The more partners involved in an IRWM, the higher the potential for better water management solutions.

In addition to the IRWM grant, are there other sources to fund a project?
Yes, while recent State bond funding measures have provided a large amount of grant funding specifically for IRWM plans and implementation, there are other opportunities for projects. Various state grant and loan programs, administered by DWR and other state agencies, can provide funding, including: FloodSAFE, urban streams, local groundwater assistance, stormwater quality, rivers and parkways, and state revolving fund loans. Federal funding may also be available for some types of projects. Local financing will make up the largest portion of funding in many regions. The IRWM plan should serve as a strategic investment plan for all sources of funding.

What's the current state of IRWM planning?
IRWM planning regions now cover approximately 82% of the area of the State, an increase of 28% in five years. Planning regions include approximately 98% of the population in California, an increase of 4% in five years. IRWM planning regions vary in size. Some cover an entire hydrologic region of the State. In other hydrologic regions there are multiple IRWM planning regions. The largest IRWM planning region is approximately 12.5 M acres and the smallest about 170,000 acres. The enclosed map presents the current IRWM planning regions in the State.

What is the relationship between local planning and IRWM planning?
Local planning is important and will continue as not all water resource management issues are regional in nature. In fact, sound local planning helps generate regional issues and objectives that can benefit from integrated solutions.

What do people involved in IRWM planning regions say?
Opinions about IRWM vary, but there is broad agreement on some of the factors that lead to successful implementation of the IRWM.

- IRWM efforts are long term.
- IRWM efforts yield unprecedented coordination and cooperation.
- One of the most valuable outcomes of IRWM efforts are the relationships formed between diverse stakeholders.

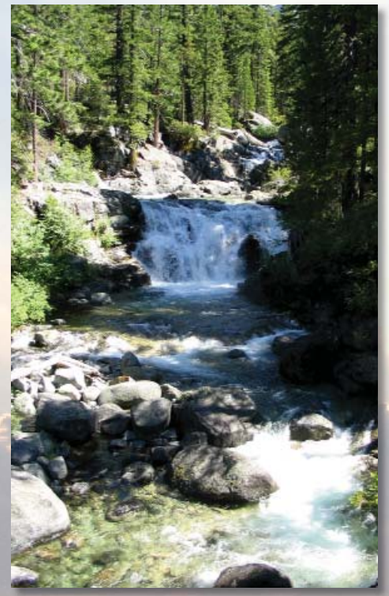
How does someone get involved?
DWR's web site contains contact information for current IRWM efforts (see resources section). If an IRWM effort does not currently exist in your area, you can begin to identify other water management entities in your area to begin the conversation or you can contact one of DWR's regional contacts to begin to connect to others in your area.

Benefits of IRWM

As indicated in the CWP Update 2009, IRWM is a key initiative to ensuring reliable water supplies in the future. IRWM helps communities and regions incorporate sustainable actions into their water management efforts.

A main focus of IRWM planning is diversification of a region's water portfolio so that multiple resource management strategies are employed in meeting future water and water quality needs of all sectors. This diversification should help regions to better prepare to face an uncertain future of water availability and water use; while protecting and improving water quality and the environment.

As a key initiative in the CWP, IRWM is a long term approach to water management in California. As IRWM evolves, DWR seeks to encourage planning efforts that are collaborative and use broad stakeholder participation to gain the input that leads to diversity of water management strategies. Such planning efforts can live well into the future beyond current state funding incentives.



Contacts

For more information on Integrated Regional Water Management, please contact us at:
DWR_IRWM@water.ca.gov

Integrated Regional Water Management
48 Accepted IRWM Regions
September 1, 2011

Legend

Prop 84 Funding Area Regions	(15) Kern County	(33) Southern Sierra
Select Water Bodies	(16) Madera	(34) Tahoe-Sierra
County Boundaries	(17) Merced	(35) Tule*
(1) American River Basin	(18) Mojave	(36) Tuolumne-Stanislaus
(2) Antelope Valley	(19) Mokelumne/Amador/Calaveras	(37) Upper Feather River Watershed
(3) Anza Borrego Desert	(20) Monterey Peninsula, Carmel Bay, So. Monterey Bay	(38) Upper Kings Basin Water Forum
(4) Yosemite - Mariposa	(21) North Coast	(39) Upper Pit River Watershed
(5) Coachella Valley	(22) North Sacramento Valley Group	(40) Upper Sacramento-McCloud
(6) Cosumnes American Bear Yuba	(23) Pajaro River Watershed	(41) Upper Santa Clara River
(7) East Contra Costa County	(24) Poso Creek	(42) Upper Santa Margarita
(8) Eastern San Joaquin	(26) San Diego	(43) Watersheds Coalition of Ventura County
(9) Gateway Region	(27) San Francisco Bay Area	(44) Westside San Joaquin
(10) Greater Los Angeles County	(28) San Luis Obispo	(45) Westside (Yolo,Solano, Napa, Lake, Colusa)
(11) Greater Monterey County	(29) Santa Ana Watershed Project Authority	(48) Yuba County
(12) Imperial	(30) Santa Barbara Countywide	(47) East Stanislaus
(13) Inyo-Mono	(31) Santa Cruz County	(48) Fremont Basin
(14) Kaweah River Basin*	(32) So. Orange County Watershed Management Area	(49) Lahontan Basins

Notes:
1) Hatch and Dot symbols are shown where there is a boundary overlap
2) Numbers shown are for reference purposes only and correspond to internal DWR RAP submittal identifications.
3) Region boundaries shown are those submitted by each applicant as part of the RAP submittal.
- RAP 2009 = ID Numbers 1 - 46
- RAP 2011 = ID Numbers 47 - 49
* Denotes Region is conditionally approved
ID No. 25 (Sacramento Valley) is no longer participating in the IRWM Grant Program and is no longer shown.

Resources

California Water Plan and Updates: http://www.waterplan.water.ca.gov/

IRWM Grant Program: http://www.water.ca.gov/irwm/

FloodSAFE: http://www.floodsafe.water.ca.gov/

Other DWR Grant programs: http://www.water.ca.gov/nav/nav.cfm?loc=t&id=103

State Water Board Financial Assistance: http://www.waterboards.ca.gov/water_issues/programs/grants_loans

Region Acceptance Process

In 2009, DWR went through a Region Acceptance Process (RAP) to accept regions into the IRWM Grant Program. Fourty six regions submitted applications, and after a thorough review and interview process, DWR approved 36 regions, and conditionally approved 10 other regions. The map above shows those regions that have been approved or conditionally approved by DWR. The DWR IRWM web site contains more specific information on the RAP.

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